ABSTRACT OF THE DISCLOSURE

A bypass graft incorporates fixation mechanisms at its opposite ends, for securing these ends to different locations along a blood vessel, or alternatively to different locations wherein one of the locations is a different vessel or an organ defining a cavity. Mechanical fixation features such as collets or grommets can be employed, enhanced by delivery of an electrical current sufficient to heat surrounding tissue to form a thermal bond. A graft deployment system includes a tissue dilator and a needle for perforating tissue, mounted coaxially within the dilator. Intralumenal systems further include a catheter for containing the dilator.

Page 31 of 36 pages